

have a common curvature according to one radius, and the radii of curvature of both carriers on each of the two long sides of the vehicle are equal.

9. The vehicle of claim 2, characterized in that the arcs of the stationary telescopes have a common curvature according to one radius, and the radii of curvature of both carriers on each of the long sides of the vehicle are equal.

10. The vehicle of claim 3, characterized in that the arcs of the stationary telescopes have a common curvature according to one radius, and the radii of curvature of both carriers on each of the two long sides of the vehicle are equal.

REMARKS

This is in response to the Office Action mailed on September 16, 2002 in which claims 1-5 and 7-10 were pending. In the Office Action, the drawings and the specification were objected to based on informalities. The previous Amendment was objected to under 35 U.S.C. §132 because it allegedly introduced new matter into the disclosure. Claims 1-5 and 7-10 were rejected under 35 U.S.C. §112, first and second paragraphs. Finally, claims 1-5 and 7-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Heckmann, U.S. Pat. No. 5,638,967, in view of Japanese Patent 5-178171 ("the Japanese '171 reference"). With this amendment, a proposed drawing correction is submitted, the alleged new matter introduced by the preliminary amendment filed April 23, 2002 has been canceled, and claim 1 has been amended to address informalities. With these amendments and the following arguments, the rejections of the Figures and of claims 1-5 and 7-10 are overcome. Reconsideration and notice to that effect is respectfully requested.

The drawings were objected to based on informalities. Specifically, the Office Action states that "reference numeral 11 does not appear to point to a pump in the drawings." (Office Action, page 2). With this Amendment, proposed drawing corrections are submitted. With these corrected figures, the objection to the drawings is overcome and should be withdrawn.

In the Office Action, the Examiner addressed two informalities in the specification by informal Examiner's amendment. Applicant gratefully acknowledges the Examiner's corrections to the abstract and to the specification at page 3, lines 22-24.

The amendment filed on April 23, 2002 was objected to under 35 U.S.C. §132 because it allegedly introduced new matter to the disclosure. Specifically, the Office Action stated, "it is new matter to state that such masts typically extend to deliver concrete at considerable heights". Applicant traverses this objection. "The fundamental inquiry is whether the material added by amendment was inherently contained in the original application." *Schering Corp. v. Amgen Inc.*, 222 F.3d 1347, 1352 (Fed.Cir.2000); *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991)("The test for sufficiency of support . . . is whether the disclosure of the application relied upon 'reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter.'") (quoting *Ralston Purina Co. v. Far-Mar-Co, Inc.*, 772 F.2d 1570, 1575 (Fed.Cir. 1985))

The statement at issue was directed at U.S. Pat. No. 5,638,967 issued June 17, 1997 to Heckmann, which specifically states:

The present invention relates to a vehicle with a built-on swiveling **mast** and a frame support according to the preamble of claim 1.

Such vehicles are intended as road vehicles for various purposes. The invention relates in particular to vehicles with a built-on concrete pump, **the mast serving as a distributing boom which bears a concrete delivery pipe so as to discharge the concrete delivered by the pump.** The invention will be explained in more detail in the following substantially with reference to this preferred embodiment of the invention.

Powerful vehicles of the type in question here must generally be provided with **greatly projecting masts.** With traveling concrete pumps the necessary projections of the mast require it to be subdivided with operating joints which also permit it to fold up for the driving mode. **Such masts reach considerable heights and trigger a moment of tilt dependent on the projection and the length of the mast. The frame support removes the moment of tilt onto the base of the vehicle, thereby preventing the vehicle from overturning with the mast. The development of such vehicles is subject to the necessity of providing constantly increasing mast**

lengths and radii due to the increasing requirements while still maintaining the vehicle profile for the driving mode. With traveling concrete pumps it is generally important not to fall below the permissible vehicle width in order to avoid restrictions for special transports that are required if the vehicle has excess widths.

('967 patent at col. 1, lines 7-34, emphasis added). Applicant believes that a worker skilled art, given a specific reference to the '967 patent, would know that "such masts typically extend to deliver concrete at considerable heights" and that such a characterization of the prior art was in Applicant's possession at the time of filing the present application. Similarly, the "stabilizing extensions" language, though not expressly included in the original application, would be readily understood by a worker skilled in the art reviewing the original application and therefore is not new matter. Nonetheless, with this amendment, the paragraphs at page 2, line 8 and at page 3, line 14 are amended to remove the alleged new matter. With this amendment, the objection to the specification is overcome and should be withdrawn. Reconsideration and notice to that effect is respectfully requested.

Claims 1-5 and 7-10 were rejected under 35 U.S.C. §112, first paragraph. Specifically, the phrase "stabilizer extensions" (sic, stabilizing extensions) in claim 1 was indicated to be "new matter not supported by the specification as originally filed." Applicant agrees that the term "stabilizing extensions" was not expressly used in the application as filed. The term "stabilizer extensions" was first introduced into the present application by the Examiner in an Office Action dated January 24, 2001, purportedly stating that a motivation to combine the Japanese '171 reference with Applicant's prior Heckmann patent existed because Japanese '171 allegedly "provides a teaching from the art that stabilizing extensions may be arranged end to end in a common carrier." (OA, 1/24/01, p. 7). Applicant accepted that the term "stabilizing extensions" accurately characterized Applicant's invention, but responsively demonstrated that Japanese '171 did not teach stabilizing extensions. Applicant submits that a worker skilled in the art would understand that the present invention provides "stabilizing extensions", and that the Examiner demonstrated by his statements in the January 24, 2001 Office Action his understanding that the present invention provides "stabilizing extensions". Nonetheless, the phrase "stabilizing extensions" is now deleted from claim 1. Claims

2-5 and 7-10 depend from claim 1. With this amendment, the rejection of claims 1-5 and 7-10 under §112, first paragraph, is overcome and should be withdrawn. Reconsideration and notice to that effect is respectfully requested.

Claims 1-5 and 7-10 were rejected under 35 U.S.C. §112, second paragraph as being indefinite. Specifically, the phrase "stabilizing extensions" in claim 1, line 5 was indicated to be "a double inclusion" of an element recited again later in the claim. With this amendment, the phrase at line 5 is deleted from the claim. Additionally, the phrase "associated ends" was indicated to be unclear. With this amendment, claim 1 is amended to clarify that the "movable telescopes emerge from associated front and back ends of the common carrier." With this amendment, the rejection of claim 1 under 35 U.S.C. §112, second paragraph, is overcome and should be withdrawn.

Claims 1-5 and 7-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Heckmann, in view of Japanese Patent 5-178171. To establish a *prima facie* case of obviousness, three criteria must be met:

First, there must be some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success.... The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

See MPEP §2142 and 2143. Moreover, when the motivation to combine the teachings of the references is not immediately apparent, the Examiner must explain why the combination of teachings is proper. *See Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986).

In the instant application, the Office Action admits, "However, Heckmann does not teach the common carrier disposing the front and back movable telescopes and the cooperating stationary telescopes one behind the other such that the movable telescopes emerge from associated ends." The Office Action goes on to state:

Japanese '171 discloses a carrier 12 that stores beams 11 with their ends adjacent so that the free ends with support member 13 emerge from the carrier 12 at its ends. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Heckmann to include a carrier that stores the beams with their ends adjacent in order to store the beams for transport using an alternative

arrangement to the various alternative equivalent arrangements already shown in Heckmann's Figures 1-2 and 3-4 (claim 1).

(Office Action, p. 5). However, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. See MPEP §2143.01, *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Clearly the above quoted passage from the Office Action provides no basis for finding a motivation to combine.

The Office Action points to no language in either reference to suggest the desirability of such a combination. In the parent application serial No. 09/692,062 in an Office Action dated January 24, 2001, the Office Action suggests that the motivation to combine the references comes from the Japanese '171 reference, which allegedly "provides a teaching from the art that stabilizing extensions may be arranged end to end in a common carrier." (OA, 1/24/01, p. 7).

Since the claims pending on January 24, 2001 did not expressly include the term "stabilizing extension", in the Amendment after Final filed on February 7, 2002, the Applicant amended the application to include claim language support for the Examiner's term "stabilizing extension." When the Amendment after Final was refused entry necessitating the present Continuation application, the Applicant filed a preliminary amendment to include the Examiner's term "stabilizing extension" in the claim. In the instant Office Action, the Examiner indicated that the incorporation of the phrase "stabilizing extension" in the instant application was "not supported by the specification as originally filed." (See 9/16/02 Office Action, p. 3). Apparently, the Examiner's asserted basis for making the proposed combination (the teaching of "stabilizing extensions") is not germane to the present application, which from the Examiner's viewpoint does not teach "stabilizing extensions".

If the instant application is directed at stabilizing extensions, then the Examiner's assertion that the "Japanese '171 reference teaches stabilizing extensions", though incorrect, would make sense as an asserted basis for making the proposed combination. Conversely, if the instant application does not teach "stabilizing extensions", then the Examiner's assertion that the "Japanese '171 reference teaches stabilizing extensions" would be irrelevant to any basis for making the proposed combination.

As Applicant has previously argued, a worker of ordinary skill in the art would not look to the Japanese '171 reference to modify the invention of Heckmann. There is no suggestion in either reference to make this combination. The Examiner's stated justification (teaching of "stabilizing extensions") is frustrated by his own assertion that the present application does not teach "stabilizing extensions." The Examiner has not so much as presented or argued any other basis for making the proposed combination. Therefore, the combination of Heckmann with the Japanese '171 patent is inappropriate, and the rejection of the present application under §103(a) should be withdrawn.

Additionally, the combination of Heckmann with the Japanese '171 reference would render the combination unsatisfactory for its intended purpose, namely to stabilize the vehicle.

If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

See MPEP §2143.01. The invention disclosed in the Japanese '171 reference is not suitable for a vehicle with a concrete pump. The cited Japanese patent discloses telescopes 11 arranged end to end in a common carrier 12. However, in this Japanese reference, the length of the telescope span is not optimized. The guides are not arc shaped, and the telescopes do not extend along the longitudinal axis of the vehicle. More importantly, the purpose in the Japanese reference is not to laterally support the vehicle during extension of a mast. The Japanese vehicle is low to the ground and has no substantial possibility of tipping during use. The purpose of the Japanese telescopes is to provide swingable support members which are able to lift and suspend the vehicle body in a balanced, controlled position above the ground. The Japanese vehicle is suspended above the ground such as to permit inspection, cleaning or mechanical work on the underside of the vehicle. (See "Purpose" in translated abstract attached). While the Japanese vehicle is suspended above the ground, the vehicle is not operable. While suspended above the ground, the Japanese vehicle has only three contact supports (See FIGS. 1 and 2 of the Japanese '171 reference) and is actually much more likely to tip than when not suspended.

The Examiner indicated that the Japanese '171 reference "provides a teaching from the art that stabilizing extensions may be arranged end to end in a common carrier." (emphasis added).

However, the cited reference does not teach stabilizing extensions. In fact, contrary to the Examiner's assertion that the Japanese '171 reference teaches stabilizing extensions, the Japanese '171 reference teaches destabilizing extensions. In the Japanese '171 reference, there is insufficient span to support a vehicle with a concrete pump having a mast producing a tilting moment. In addition, lifting from the ground a vehicle with a concrete pump, which is already at or near its weight limit, is wholly unnecessary and undesirable. Lifting a vehicle having a mast for delivering concrete, and supporting the vehicle with only three support legs during operation would be disastrous. U.S. Patent 5,638,967 offers a solution for the problem, namely achieving an appropriate support for a vehicle with a concrete pump.

In the Japanese '171 reference, the swingable support members are somewhat slidable in the width direction, but the purpose of this width direction movement is adjustability (see last line of the abstract), not improved stability against tilting through a wider span of the telescopes. This can also be seen in the drawings of the Japanese reference showing a minimum span of the telescopes. The purpose of the telescopes 11 in the Japanese reference is therefore completely unrelated to the possibility of tipping of the vehicle.

If the invention of Heckman were combined with the three-legged support of the Japanese '171 reference, the resulting combination would be unstable during operation. This instability is precisely the problem that is addressed by the instant invention.

The field of applications of the vehicle described in the Japanese document and the purpose of the movable grounding suspension members are very different to that of the subject application. A worker skilled in the art, interested in preventing tilting of a vehicle during use of a mast, would have no motivation to turn to the three-legged, suspension mechanism of the Japanese reference which renders the Japanese vehicle more likely to tip. The fact that the Japanese reference shows a telescoping support in suspending a vehicle above the ground by three contact supports does not suggest that its telescoping support has applicability for stabilizing a masted vehicle against tilting.

There is no suggestion, in the Japanese reference or elsewhere in the art, which would motivate the worker skilled in the art to look at vehicle suspension mechanisms which render the vehicle inoperable during suspension. There is no suggestion, in the Japanese reference or elsewhere

in the art, which would motivate the worker skilled in the art to look at vehicle suspension mechanisms which render the vehicle less stable. To the contrary, the present invention is directed at structure to be employed while the masted vehicle is in use, to stabilize the masted vehicle against tilting. Thus, there is no suggestion to combine the cited references. The rejection of claim 1 based on the combination is overcome, and should be withdrawn.

Claims 2-5 and 7-10 depend from amended claim 1. As previously discussed, claim 1 is allowable over the cited references. Therefore, claims 2-5 and 7-10 are allowable over the cited references.

With respect to claim 5, the Examiner indicated that it would have been obvious to a worker skilled in the art at the time of the invention to "make the movable telescopes with different curvatures ... as an obvious matter of design choice, as the invention would appear to work just as well with the movable telescopes having different curvatures as having the same curvatures." Contrary to the Examiner's assertion, the specification provides the following reason for allowing different curvatures:

The invention allows the telescope jibs to be disposed and designed in accordance with the requirements of the individual case. According to claim 5, the moveable telescopes of at least one, but preferably both, sides of the vehicle therefore have different curvatures and the carriers have a corresponding curvature for each telescope. **Such a design of the frame support permits different spans on the front and back frame supports and thus a better adaptation of the frame support to the tilting moments dependent on the mast.**

(page 3, lines 15-21, emphasis added). Allowing for different curves thus provides a better adaptation of the frame support to the tilting moments than it would if the curves were the same. Additionally, on page 5 at lines 11-15, the Applicant noted that having different curvatures for each of the telescopes "makes it possible to select the spans of the front and back frame supports differently in accordance with the requirements of an individual case." Thus, the applicant provided reasons for the different curvatures, and the limitations of claim 5 are patentable over the cited references.

With this amendment, the objections to the specification, the drawings and the claims are overcome and should be withdrawn. The rejection of claims 1-5 and 7-10 under 35 U.S.C. §103(a) is overcome and should be withdrawn. All of pending claims 1-5 and 7-10 are

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Application No.: 10/056,898

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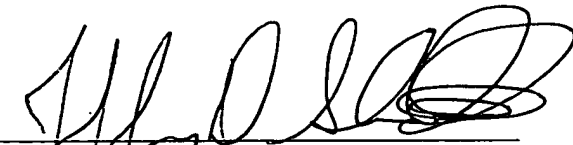
allowable over the cited art. Reconsideration and notice to that effect is respectfully requested. The Examiner is invited to contact the undersigned attorney at the telephone number listed below if such a call would in any way facilitate allowance of this application.

Respectfully submitted,

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Application No.: 10/056,898

**APPENDIX:
MARKED UP VERSION OF SPECIFICATION AND CLAIM AMENDMENTS**

IN THE SPECIFICATION

Please amend the paragraph beginning at page 2, line 8 as follows:

Such vehicles are known in the art (DE 43 44 779 A1, corresponding to U.S. Pat. No. 5,638,967 issued June 17, 1997 to Heckmann)[, and the vehicles typically have a swiveling mast which extends to deliver concrete at considerable heights]. The stationary telescopes of each side of the vehicle are executed here separately from each other in carriers and disposed on the vehicle frame either one above the other or concentrically to each other. This leads to a considerable space requirement on both sides of the vehicle and also to additional technical effort due to the separate fastening of each stationary telescope to the vehicle frame, one consequence being an increase in vehicle weight, which is already substantially exploited by the heavy superstructure.

Please amend the paragraph beginning at page 3, line 14 as follows:

These embodiments of the invention are not necessary for its realization, however. The invention instead allows the telescope jibs [or stabilizing extensions] to be disposed and designed in accordance with the requirements of the individual case. The movable telescopes of at least one, but preferably both, sides of the vehicle therefore have different curvatures and the carriers have a corresponding curvature for each telescope. Such a design of the frame support permits different spans on the front and back frame supports and thus a better adaption of the frame support to the tilting moments dependent on the mast.

IN THE CLAIMS

1. (Twice Amended) A vehicle for delivering concrete to an elevated location, the vehicle having opposing long sides, a front and a back, the vehicle comprising:

a concrete pump having a feeding hopper;
a superstructure with at least one swiveling extendable mast on a slewing gear;
and

a frame support [having stabilizing extensions] for stabilizing the vehicle against tilting when the swiveling extendable mast is in an extended mast position, the frame support comprising:

two pairs of movable telescopes, each pair including a front and a back movable telescope, one of the pairs of movable telescopes disposed on each of the long sides of the vehicle, wherein the movable telescopes are [stabilizing extensions] for stabilizing the vehicle against tilting when the swiveling extendable mast is in an extended mast position; and

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a pair of common carriers, one of the common carriers disposed on each of the long sides of the vehicle, each common carrier providing stationary telescopes disposed at least partly in an arc tangentially to a longitudinal direction of the vehicle and extending in each case from one of the long sides of the vehicle inward substantially as far as a middle of the vehicle and then outward to the same long side, each stationary telescope cooperating with one of the movable [telescope] telescopes to allow the movable telescope to extend outward from the corresponding long side of the vehicle, wherein the common carrier disposes the front and back movable telescopes and the cooperating stationary telescopes one behind the other such that the movable telescopes emerge from associated front and back ends of the common carrier.